REMARKS

Claims 26 and 27 have been amended. New claim 30 has been added. The application now includes claims 1-30.

The specification has been amended on pages 1, 8, and 12, in the manner suggested by the Examiner. The change on page 1 of the application from "homogenous" to "homogeneous" is merely a word choice, and the meaning is essentially the same. With respect to "psia" and "psig", it should be understood that "psi" stands for "pounds per square inch", and that pressure can be measured with a pressure gauge. When measured with a gauge the reported pressure is typically designated as "psig" standing for "pounds per square inch gauge". Absolute pressure is gauge pressure plus atmospheric pressure. Most gauges read zero when in fact the prevailing pressure is atmospheric pressure. It is noted that most patents read "psi" regardless of whether the pressure is gauge or absolute, and the amendment has been made in the present application on this understanding and in view of the Examiner's requirement. It is noted that the difference between psig and psa pressure is small enough that no noticeable change is observed in the phenomena described in the patent specification. No new matter is added.

The undersigned notes with appreciation that the drawing figure has been accepted.

With respect to the provisional rejection for obviousness-type double patenting, the undersigned notes that no claims have been allowed in USPG-Pub 2005/0075460 A1, and that, therefore, until claims are allowed in either case, action on this matter can be deferred. Furthermore, it is noted that the applicant's in the present application are the same as those in USPG-Pub 2005/0075460 except that one additional inventor is named in USPG-Pub 2005/0075460 due to differences in the claimed subject matter. In addition, the present application is owned by an entity which owns a joint right in USPG-Pub 2005/0075460. Finally, the present application and USPG-Pub 2005/0075460 were filed simultaneously on the same date.

Claims 26 has been amended to address the rejection lodged under 35 U.S.C. 112, second paragraph. Specifically, claim 26 now requires that the chemical agent is solubilized virturally to a point of saturation. As is noted on page 8 of the application, at line 17, the chemical agent is "first pre-dissolved, preferably virtually to saturation, in a suitable solvent". Likewise, page 4 of the application at lines 15 and 16 indicates that the "chemical agent is solubilized virtually to the point of saturation". One of ordinary skill in the art will recognize and understand the meaning of solubilizing a chemical agent virtually to a point of saturation.

Claim 27 has been amended to address the rejection lodged under 35 U.S.C. 112, second paragraph. Specifically, claim 27 now requires that the solvent does not solubilize said at least one polymer in an amount more than 1% by weight. As is noted on page 8 of the application at lines 25 to 28, the specification teaches that "the solvent does not dissolve the polymer to any great extent (e.g., less than approximately 1% by weight)".

Claims 1-29 have been rejected as being anticipated by U.S. Patent 5,766,522 to Daly or U.S. Patent 5,548,004 to Mandel. These rejections are traversed.

The claimed invention describes a process quite different than that which is taught in Daly or Mandrel. In particular, in the claimed process a chemical agent is permitted to impregnate within a swollen polymer material (the polymer material having been swollen by a super critical fluid). The chemical agent can either be solubilized in the supercritical fluid, or, as is set forth in claims 24-26, can be first solubilized in a solvent, and then the solvent mixture is solubilized in the supercritical fluid. As is shown in the Examples at pages 11-20 of the application, the process of the present invention allows a variety of chemical agents to be distributed within a polymer by impregnation such that the chemical agents are associated with functional groups on the polymer chains of the polymer material. The process also allows formation of free flowing powders where, for example, milling procedures (see claims 11-13 and 28) are employed when combining the chemical agent with the polymer in the presence of the supercritical fluid (i.e., the process is not relying on release of pressure and or spraying of the polymer to produce the powder particles).

Neither Daly nor Mandrel teach or suggest a process where a "combining step permits said at least one chemical agent to impregnate within said at least one polymer" (as is required in claim 1). Quite the contrary. With reference to Daly, there is described a process which utilizes super critical fluids to decrease the viscosity of the polymer (see Daly at column 6, lines 3-10 and 37-43). This is to be avoided in the practice of the claimed invention wherein the polymer is swollen by the super critical fluid which impregnates the polymer with the chemical agent that is dissolved therein. With reference to Mandrel, and particularly the Abstract referenced by the Examiner, it can be seen that Mandrel's process contemplates collecting the first and second organic materials in the second vessel (i.e., Mandrel does not show or suggest the impregnation of a chemical agent within a polymer material where it is associated with functional groups on the polymer chains).

In addition, both Daly and Mandrel contemplate processes where spraying or depressurization is used to produce powders. Specifically, note spray nozzle 76 in Figure 1 of Daly, and note column 7, lines 41 to 53 of Mandel). Neither Daly nor Mandel describe agitation in the presence of supercritical fluid to produce a powder as set forth in claim 30 (i.e., agitation being performed during the permitting step to produce the powder).

In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 1-30 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,

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